

## CLAIMS

## We Claim:

1. A method for communication between a Common Information Model (CIM) object manager of a host computer and a CIM repository, said method comprising:

creating a connection between said object manager and said CIM repository;

passing a protocol indicator from said object manager to a repository application programming (API), said protocol indicator identifying a protocol by which said CIM object manager desires to communicate with said CIM repository;

creating a protocol-specific object having methods implemented using said protocol; and

returning said protocol-specific object to said CIM object manager, whereby said CIM object manager may communicate with said CIM repository using said protocol.

2. The method of claim 1 further comprising:

invoking a method defined upon said protocol-specific object;

transmitting said method using said protocol over said connection to said CIM repository; and

returning a result to said CIM object manager over said connection using said protocol.

- 3. The method of claim 1 wherein said protocol is LDAP, JDBC, or JAVA.
- 4. The method of claim 1 wherein said CIM repository is resident on said host computer.



5. The method of claim 1 wherein said CIM repository is resident on a separate computer.

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6. The method of claim 1 wherein said creating a protocol-specific object includes calling a JAVA factory class.

A computer system for interacting with a CIM repository database, said system comprising:

a CIM object manager including a protocol indicator and program code for interacting with said CIM repository; and

a repository application programming interface (repository API) including

a factory class arranged to receive said protocol indicator from said object manager and produce a protocol-specific object,

a first class having methods defined thereon implemented in a first protocol, and

a second class having methods defined thereon implemented in a second protocol, whereby said protocol-specific object may be returned to said object manager for use in interacting with said CIM repository.

8. The system of claim 7 wherein said CIM object manager is arranged to receive a method call from a management application using the protocol identified by said protocol indicator.





9. The system of claim 7 wherein said CIM repository is resident on said computer system.

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10. The system of claim 7 wherein said computer system and said CIM repository are connected over a network connection implemented in the protocol identified by said protocol indicator.

- 11. The system of claim 7 wherein the protocol identified by said protocol indicator is LDAP, JDBC or JAVA.
- 12. The system of claim 7 further comprising:

a plurality of CIM repositories, each repository arranged to communicate with said CIM object manager using a different protocol.

- 13. The system  $\phi$ f claim 12 wherein each repository is resident on a different computer.
- A computer-readable medium comprising computer code for communication between a Common Information Model (CIM) object manager of a host computer and a CIM repository, said computer code of said computer-readable medium effecting the following:

creating a connection between said object manager and said CIM repository;

passing a protocol indicator from said object manager to a repository application programming (API), said protocol indicator identifying a protocol by which said CIM object manager desires to communicate with said CIM repository;

creating a protocol-specific object having methods implemented using said protocol; and

returning said protocol-specific object to said CIM object manager, whereby said CIM object manager may communicate with said CIM repository using said protocol.

15. The computer-readable medium of claim 14 further comprising computer code for effecting the following:

invoking a method defined upon said protocol-specific object;

transmitting said method using said protocol over said connection to said CIM repository; and

returning a result to said CIM object manager over said connection using said protocol.

16. The computer-readable medium of claim 14 wherein said protocol is LDAP, JDBC or JAVA.

17. The computer-readable medium of claim 14 wherein said creating a protocol-specific object includes

calling a JAVA factory class.